there was an equal incidence of tumours in the stomach and small intestine. He suggested a local immunological response that controlled the development of small bowel-tumours.

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Traumatic Arterial Thrombosis, Two Cases

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Case 1 D M P, man aged 29
Admitted with claudication in the right leg ten weeks after having been kicked in the right groin by a horse. The injury led to an extensive and painful hæmatoma which confined the patient to bed for two weeks. During this period there was no evidence of distal ischæmia, but when he resumed work as a building contractor, claudication in the right calf occurred after walking one hundred yards. Climbing ladders produced a painful, cold and numb foot. Examination two months after the injury revealed a thrombosed right common femoral artery, absent distal pulses but minimal impairment in the skin blood supply. A left transfemoral arteriogram revealed a 4 cm block in the right femoral artery and an extensive collateral circulation (Fig 1).

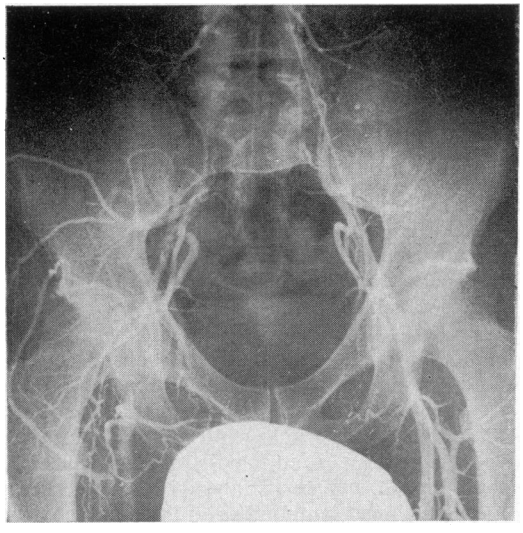

Fig 1, **Case 1** *Left transfemoral arteriogram showing localized block in right common femoral artery, and extensive collateral circulation*

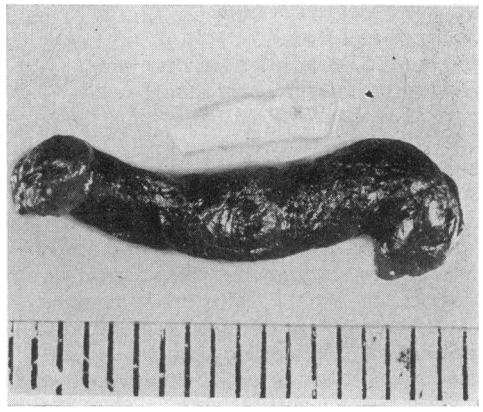

Fig 2, **Case 2** *The small white specimen is a fragment of intima which had occluded the artery allowing a secondary thrombosis to develop (scale in mm)*

At operation the thrombosed segment of artery, which was surrounded by dense fibrous tissue, was excised and a vein graft inserted. Circulation to the right leg was restored and the patient discharged free of symptoms.

Case 2 R T, man aged 29
Suffered a posterior dislocated left elbow whilst performing gymnastics. After the dislocation had been reduced with difficulty, the brachial and radial artery pulses were absent. The patient had no symptoms but the left hand was cool and pale. A provisional diagnosis of 'arterial spasm' was made and intravenous low molecular weight dextran given. After six hours' observation the signs remained unchanged, and the brachial artery was explored through a longitudinal incision.

The lower end of the artery showed localized subadventitial bruising and pulsation was absent in a 5 cm segment of artery immediately proximal to the contusion. There was no pulsation in radial and ulnar arteries. Arteriotomy revealed a fracture of the intima with superadded secondary thrombosis producing total occlusion of the vessel. The torn intima and soft thrombus were removed (Fig 2) and the arteriotomy closed using a vein patch. The skin incision was extended and decompression of the superficial flexor muscles of the forearm performed by a fasciotomy. Recovery was uneventful and except for a slight reduction in elbow extension, the patient remains well.

Discussion
The incidence of arterial injury in civilian practice is low, occurring in less than 4% of patients with skeletal trauma (Connolly 1970). The brachial and femoral arteries are most vulnerable to injury (Morris *et al.* 1957).

These 2 patients illustrate the special features of traumatic arterial thrombosis and emphasize that 'arterial spasm' is a dangerous diagnosis. Traumatic arterial thrombosis is a treacherous condition because the signs of acute vascular insufficiency may be absent initially. Usually a fracture of the intima occurs and several hours later a superadded secondary thrombosis develops. In young patients the opening-up of collateral vessels may delay signs of ischæmia. This was demonstrated by the first patient in whom an early exploration would probably have revealed intimal damage and thrombosis. The second patient had no symptoms but because signs of arterial insufficiency persisted, the vessel was explored within a few hours of injury.

Although 'arterial spasm' occurs (Kinmonth 1952) it is extremely rare and every case of persistent ischæmia should be subjected to exploration without delay. Time should not be lost by resorting to conservative measures which may have disastrous consequences. Arteriography should in principle be of value but in practice it causes more delay and a high index of clinical suspicion remains the chief basis of diagnosis (Eastcott 1973).

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Primary Adenocarcinoma of the Vermiform Appendix

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A 58-year-old man was investigated for bright rectal bleeding and was found to have a 5 mm sessile metaplastic polyp at 12 cm from the anal ring. An air contrast barium enema demonstrated another polyp in the sigmoid colon. Colonoscopy was performed at St Mark's Hospital; the cæcum was 'fixed' and it was difficult to pass the instrument into it. The sigmoid polyp was excised and found to be adenomatous. A second barium enema was performed and was normal. However, 5 days later, the patient was admitted with a perforated appendix. Appendicectomy was performed and on subsequent histological examination the appendix was found to contain a primary adenocarcinoma. A right hemicolectomy was subsequently performed and well differentiated adenocarcinoma was found only in the appendix stump. The patient had an uneventful postoperative course and was discharged.

Comment

True primary adenocarcinoma of the vermiform appendix has been reported in 158 patients in the world literature according to Hopkins *et al.* (1973) and these authors reported 7 new patients. Primary adenocarcinoma of the appendix occurs more commonly in men than women, and patients have presented between ages 44 and 75. Presentation by perforation carries a grave prognosis. The benefit of right hemicolectomy over simple appendicectomy in terms of survival rates is very minimal according to available data.

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Intermittent Jaundice due to a Carcinoma of the Ampulla of Vater

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D D, woman aged 55

History: First seen by Dr E R Beck in outpatients in October 1970, complaining of itching all over her body, decreased appetite and loss of weight for four months.

On examination: Looked emaciated and had scratch marks but no other abnormal physical signs.

Soon after this she became jaundiced and was admitted for investigation. Physical examination was again normal and, in particular, the gallbladder was not palpable. Serum bilirubin 1.3 mg/100 ml, alkaline phosphatase 79 units/100 ml, SGPT 49 units and ESR 72 mm in the first hour (Westergren).

The jaundice deepened and several liver function tests again showed raised bilirubin, alkaline phosphatase and enzymes. Barium meal was normal. Liver and pancreatic scan both showed filling defects and suggested a diagnosis of carcinoma of the pancreas with liver secondaries.

Needle biopsy of the liver performed on 23.11.70. That evening the patient developed Gram-negative septicæmic shock (blood culture grew *E. coli*). This was treated with gentamycin and hydrocortisone. She recovered but went into renal failure due to hypotensive tubular necrosis. This was managed successfully with careful attention to fluid balance. Liver biopsy showed a picture suggestive of obstructive jaundice.

A week later a steroid-induced duodenal ulcer perforated, and was closed by simple suture. At this operation she was too ill to examine the pancreas fully, but there was no obvious pancreatic tumour and no gall-stones. After this